

REMARKS

The amendment to the specification corrects a typographical error in the Preliminary Amendment filed with the present patent application on 03/12/2001. In particular, the Preliminary Amendment filed on 03/12/2001 inserted new text after line 5 of page 1 of the specification, making reference to the prior patent application of S.N. 09/452,259, filed 12/01/99. However, the new text should instead be inserted between lines 1 and 2 of page 1 of the specification. Accordingly, the present amendment to the specification corrects this error.

The Examiner rejected claims 13-16 under 35 U.S.C. §102(e) as allegedly being anticipated by Abbott et al. (U.S. Patent #6,337,445).

Although the Examiner rejected claims 17-19, the Examiner did not state a statutory basis for rejecting claims 17-19. Accordingly, Applicants respectfully contend that the rejection of claims 17-19 is improper and should be withdrawn.

Applicants note that the amendment herein of claims 13-19 are not in response to the rejection of claims 13-19, but instead are for the purpose of improving clarification of the claims.

Applicants respectfully traverse the §102(e) rejections with the following arguments.

35 U.S.C. §102(e)

The Examiner rejected claims 13-16 under 35 U.S.C. §102(e) as allegedly being anticipated by Abbott et al. (U.S. Patent #6,337,445).

Applicants respectfully contend that claim 13 is not unpatentable over Abbott, because Abbott does not teach each and every feature of claim 13.

As a first example why Abbot does not teach each and every feature of claim 13, Abbott does not teach the feature: "wherein the contact arranged on the substrate is substantially quadrilateral in shape".

The Examiner argues that Abbott discloses substrate contact 819 as being substantially quadrilateral in shape.

In response to the preceding argument by the Examiner, Applicants respectfully contend that Abbot's description of Abbot's invention does not disclose the shape of the substrate contact 819. The only descriptive information provided by Abbot about reference numeral 819 is that reference numeral 19 pertains to a contact pad. Furthermore, FIG. 8 of Abbot likewise does not disclose the shape of the substrate contact 819. Indeed, FIG. 8 of Abbot depicts only a cross-sectional view of the substrate contact 819 which discloses only the shape of a cross-sectional cut through the substrate contact 819 and does not show the shape of the substrate contact 819.

As a second example why Abbot does not teach each and every feature of claim 13, Abbott does not teach the feature: "in which said substrate contact is adapted for x-ray through

said electronic package to illuminate said solder ball and said contact, so that a bad joint shows in said x-rays as a round image of said solder ball and a good joint, in which said solder ball flows into said substantially quadrilateral shape, shows in said x-rays as a quadrilateral image".

The Examiner argues that Abbot teaches said feature of claim 13 in col. 9, lines 63-67.

In response to the preceding argument by the Examiner, Applicants respectfully contend that col. 9, lines 63-67 teaches only that "density of lead (Pb) bearing connection structures contribute to package weight and to obscuring x-ray penetration which is used to inspect for defects in solder joints. Both of these factors support replacement of lead (Pb) containing connection structures by alternate materials", which is not a teaching of said feature of claim 13.

Based on the preceding arguments, Applicants respectfully maintain that claim 13 is not unpatentable over Abbott, and that claim 13 is in condition for allowance. Since claims 14-16 depend from claim 13, Applicants contend that claims 14-16 are likewise in condition for allowance.

CONCLUSION

Based on the preceding arguments, Applicants respectfully believe that all pending claims and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicants invites the Examiner to contact Applicants' representative at the telephone number listed below.

Date: 01/26/2004

Jack P. Friedman  
Jack P. Friedman  
Registration No. 44,688

Schmeiser, Olson & Watts  
3 Lear Jet Lane, Suite 201  
Latham, New York 12110  
(518) 220-1850